

ABSTRACT

An aerodynamic method of making tissue paper comprises the steps of preparing an aerosuspension out of cellulose fibers, forming a layer of fibers on a forming wire, moistening the formed layer of fibers and pressing and drying of said formed layer. The step of moistening the layer of fibers is performed concurrently with the step of pressing, for which purpose the layer of fibers is placed between the profiling and moistening belts. The surface of the profiling belt comprises protruding elements, wherein a distance between two mutually-adjacent protruding elements doesn't exceed an average length of the fibers. A wire with smoothed nodes of interweaving threads can be used as the profiling belt, while fine-mesh wire can be used as a moistening belt. Selective moistening of fibers only in the areas being pressed eliminates moistening of the entire layer, and drying of the paper web requires significantly less expenditures of time and energy. Shrinkage of the paper web is also minimized because the non-pressed areas of fibrous layer don't practically get moistened.

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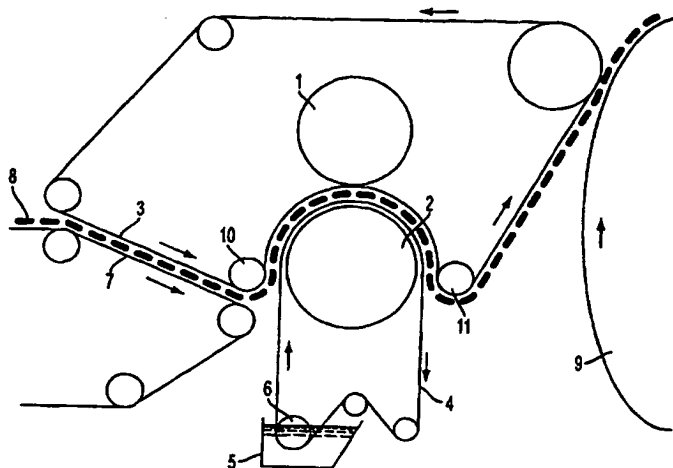
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(57) Abstract

An aerodynamic method of making tissue paper comprises the steps of preparing an aerosuspension out of cellulose fibers, forming a layer of fibers (8) on a forming wire (7), moistening the formed layer of fibers and pressing and drying of said formed layer. The step of moistening the layer of fibers is performed concurrently with the step of pressing, for which purpose the layer of fibers is placed between the two mutually-adjacent protruding elements doesn't exceed an average length of the fibers. A wire with smoothed nodes (14) of interweaving threads can be used as the profiling belt, while fine-mesh wire can be used as a moistening belt. Selective moistening of fibers only in the areas being pressed eliminates moistening of the entire layer, and drying of the paper web requires significantly less expenditures of time and energy. Shrinkage of the paper web is also minimized because the non-pressed areas of fibrous layer don't practically get moistened.